

### **ABSTRACT OF THE INVENTION**

One or more biocatalysts or a combinatorial array of biocatalysts is produced by providing a host cell; recombining at least two biotransformation genes for modifying a chemical substrate into the host cell; and thereby producing at least one recombinant strain comprising a biocatalysts. Additionally, the screening of cells having at least two distinct biotransforming catalysts combined therein may be performed by providing multiple wells, each of the multiple wells containing cells having at least two distinct biotransforming catalysts combined therein; and providing multiple wells, each of the wells containing different cells having at least two distinct biotransforming catalysts combined therein; and then allowing cells within the well to catalyze a reaction with a compound within each well, and analyzing the results of any reactions within each well to determine any functional activity of cells within each well.